DENVER • ASPEN
BOULDER • COLORADO SPRINGS
DENVER TECH CENTER
BILLINGS • BOISE
CHEYENNE • JACKSON HOLE
SALT LAKE CITY • SANTA FE
WASHINGTON, D.C.

SUITE 3200
555 SEVENTEENTH STREET
DENVER, COLORADO 80202-3979
MAILING ADDRESS
P.O. BOX 8749
DENVER, COLORADO 80201-8749

TELEPHONE (303) 295-8000 FACSIMILE (303) 295-8261 www.hollandhart.com

Robert T. Connery (303) 295-8133 (303) 727-5832 Fax rconnery@hollandhart.com

April 29, 2002

#### VIA HAND DELIVERY

Richard R. Long Director, Air and Radiation Program USEPA, Region 8 999 18th Street, Suite 300 Denver, CO 80202-8917

Subject:

Response to EPA's "Draft Dispersion Modeling Analysis of PSD Class I Increment Consumption in North Dakota and Eastern

Montana" (January 2002)

Dear Mr. Long:

By letter dated March 5, 2002, you requested comment on EPA Region 8's "Draft Dispersion Modeling Analysis of PSD Class I Increment Consumption in North Dakota and Eastern Montana" ("EPA's Draft Modeling Analysis"). On behalf of Basin Electric Power Cooperative (which includes Dakota Gasification Company), Robert Hammer and Kirk Winges of Tetra Tech and Robert Paine of ENSR International, and their colleagues, have conducted a review and analysis of that modeling analysis in the attached "RESPONSE TO DRAFT DISPERSION MODELING ANALYSIS OF PSD CLASS I INCREMENT CONSUMPTION IN NORTH DAKOTA AND EASTERN MONTANA" (April 2002)(the "Response"). The qualifications of those authoring the Response are provided in Appendix A to the Response.

The Response concludes that the EPA Draft Modeling Analysis should not be used at this time for the following reasons:

 CALPUFF has not been designated as an approved guideline model that may be used without case-by-case justification. The notice and opportunity for hearing on the application of this model in North Dakota required by the Clean Air Act has not been provided. Although CALPUFF has been proposed as an approved long-range transport model, the final version has not been promulgated.

Richard R. Long April 29, 2002 Page 2

- Several problems have been identified with the emissions inventory. These include:
- Failure to include significant increment-expanding minor sources
- Underestimation of certain increment expanding sources
- Failure to exclude emissions from sources granted variances authorizing exceedance of the increment
- Failure to include increment-expanding emissions from the Mandan Refinery
- Inconsistent approach for calculating current and baseline emissions from major sources
- The Response has identified important problems presented by the processing of the meteorological data. Most significantly, Tetra Tech and ENSR International are concerned about the limitations for CALMET, as applied by EPA, to accurately represent upper air data. The sparsity of upper air measurements, use of coarse grid resolution, use of a modified wind extrapolation method, and, in some cases, use of arbitrary input parameters all bring into question to the validity of the meteorological dataset used by EPA.
- There is evidence that CALPUFF is overpredicting concentrations by about a factor of 2.

In addition to the technical and scientific analysis of EPA's Draft Modeling Analysis, we submit the following discussion of legal and other factors for EPA's consideration in evaluating its Draft Modeling Analysis.

# ACTUAL AMBIENT AIR QUALITY MEASUREMENTS IN NORTH DAKOTA CLASS I AREAS DEMONSTRATE NO SIGNIFICANT DETERIORATION

A review of available data demonstrates that there is no significant deterioration of air quality in North Dakota and Montana Class I areas that would justify North Dakota SIP revisions.

As documented at pages 9-11 of Basin Electric's letter to Mr. Terry O'Clair of the North Dakota Department of Health dated September 7, 2001 (the September 7th letter), a copy of which is attached as Appendix B to the Response, all available monitoring data show either a stable or declining trend in North Dakota Class I SO<sub>2</sub> ambient concentrations since 1979. The measured

Richard R. Long April 29, 2002 Page 3

 $SO_2$  data in TRNP North Unit for 24-hour periods shows a decline in the highest second high in the early 1980s (approximately 94  $\mu$ g/m³ in 1982) to 1998 levels of approximately  $11\mu$ g/m³ (see Figure 2, page 10 of App. B of Response). The trend line shows a reduction from approximately 35  $\mu$ g/m³ in 1979 to a level of less than 10  $\mu$ g/m³ in the year 2000 (see Figure 3, page 11 of App. B of Response. This compares to an applicable Class I increment for non-variance sources of 5  $\mu$ g/m³, and an applicable alternate increment for variance sources of 91  $\mu$ g/m³.

Though the level of  $SO_2$  was not measured during the period before or directly after the setting of the minor source baseline statewide on December 7, 1977, there appears to be no reason to believe that it varied significantly from the levels measured in 1980. In other words, the increment in TRNP North Unit is shown to have expanded by approximately 25  $\mu$ g/m3, approximately five times the Class I increment. Thus, the  $SO_2$  air quality in TRNP-North Unit has improved, not deteriorated, and the applicable increment has not been exceeded, but has been expanded.

In TRNP South Unit, the levels are stable at very low levels approaching non-detectable levels. No significant deterioration or consumption of the applicable increment is shown by the measured SO<sub>2</sub> data during the last 20 years (see Figures 2-5, noted above). The air in TRNP South Unit, like that in TRNP-North Unit, is exceedingly clean, measuring non-detectable levels most of the time.

In an assessment of a series of projects during the 1980's and 1990's, FLMs for the Class I areas found that SO<sub>2</sub> emissions from the facilities did not adversely affect AQRVs and therefore granted variances for those projects. The SO<sub>2</sub> 24-hour highest second high level in TRNP-North Unit were at approximately 94 µg/m<sup>3</sup> when the first set of these variances finding no adverse effects on AQRVs was granted in 1982 to six sources (four of which were never built). By 1993 when the last of these variances was granted for a modification of one of the variance sources, the highest 24-hour level on which the finding of no adverse effects on AQRVs was based was 12.7 µg/m<sup>3</sup>. Since 1993, SO<sub>2</sub> emissions in North Dakota have continued to decline significantly, with emissions from utilities declining approximately 10,000 tons per year between 1993 and 2000, while the total SO<sub>2</sub> emissions inventory decreased by approximately 40,000 tons per year (See Table 1 at page 12 of the September 7th letter, App.B to Response.). Particularly noteworthy is the fact that SO<sub>2</sub> emissions from oil and gas sources, which are the sources closest to the Class I areas, have declined significantly over the past two decades, from approximately 35,000 tons per year in 1982 to approximately 5,000 tons per

Richard R. Long April 29, 2002 Page 4

year in the year 2000. Indeed, a common sense reckoning of the magnitude of the decrease in oil and gas emissions from low level sources nearer to TRNP to the magnitude of the decrease in measured levels in TRNP-NU indicates roughly equivalent decreases. Moreover, when considered with the SO<sub>2</sub> emissions decreases in the overall emissions inventory, the amount of air quality improvement shown in TRNP-North Unit tracks the overall improvement in SO<sub>2</sub> emissions reasonably well.

To be weighed against the actual fact of significantly improved or unchanged air quality in North Dakota's Class I areas, and significantly decreased actual emissions from the sources potentially affecting North Dakota's Class I areas, is EPA Draft Modeling Analysis, which assumes that; (1) an SO<sub>2</sub> emissions increase from North Dakota sources, (2) has caused significant deterioration, exceeding the Class I increment. It is evident that neither of these assumptions comports with the reality of air quality and emissions in North Dakota and its Class I areas. Indeed, the facts clearly show that the modeling exercise is simply wrong.

The CALPUFF model utilized by EPA has not been approved for incorporation into 40 CFR Part 51, Appendix W, "The Guideline on Air Quality Models". No long-range transport model is included in Appendix A to Appendix W approved for general use without special approval. Both EPA and North Dakota rules generally require notice and opportunity for hearing before using a model not approved for use in the Guideline. No notice and opportunity for hearing on the CALPUFF model for this purpose has yet been held by EPA.

Appendix W, Section 11.2.2, Use of Measured Data in Lieu of a Model Estimates, provides that, although modeling is EPA's preferred method, "[t]here are circumstances where there is no applicable model, and measured data may need to be used." Section 1.0 b of Appendix W states that "[a]ir quality measurements though can be used in a complementary manner to dispersion models, with due regard for the strengths and weaknesses of both analytical techniques. Measurements are particularly useful in assessing the accuracy of model estimates. The use of air quality measurements alone however could be preferable... when models are found to be unacceptable and monitoring data with sufficient spatial and temporal coverage are available." In this case, the sources modeled are at distances of several hundred kilometers. As a result, the spatial dispersion of the plumes reaches proportions justifying the use of a single monitor in the North Dakota Class I areas, and making reliance on those measurements prudent when compared to long-range transport modeling.

Richard R. Long April 29, 2002 Page 5

Section 6.0 of the Response discusses the performance of the CALPUFF model in this case compared to ambient measurements, and concludes that the model systematically overpredicts ambient concentrations by a factor of approximately 2 at the distances involved in assessing impacts on North Dakota's Class I areas. Given the extremely small size of the PSD Class I short-term increments, the magnitude of this overprediction easily could account for a predicted increment violation when none exists.

The most reliable and compelling data in this case, therefore, indicates strongly there is no significant deterioration of air quality in Class I areas and, therefore, no basis for requiring any SIP revision. Given that the only analysis to the contrary is a mathematical and hypothetical exercise based on predictions using a non-approved model that has been demonstrated to significantly overpredict at the distances involved in this application, it would be folly to rely on the biased model results.

#### **MODEL INPUTS**

If modeling is nonetheless used, it is critical that inputs to the model be consistent with both regulatory and technical standards, and constitute the best and most reliable information available. Where discretionary judgments must be exercised in selecting inputs, judgments should be made by the North Dakota Department of Health ("NDDH"), the permitting agency authorized to administer the EPA-approved PSD program in North Dakota. The NDDH has the knowledge and expertise with respect to the meteorological inputs critical to the modeling, as well as the emissions of sources in North Dakota and how they should be input to the models. EPA should defer to the judgment of the NDDH with respect to modeling inputs and assumptions. Because the NDDH has done such modeling, and it demonstrates compliance with the applicable increments, comporting more nearly with the actual measured data and emissions trends in North Dakota actually affecting the North Dakota Class I areas, there would appear to be no need for EPA modeling. Discussions concerning specific model inputs can be found in Sections 3.0 through Section 6.0 of the Response.

#### **BASELINE EMISSIONS**

For baseline sources, baseline emissions should be the source-specific allowable emissions for those sources. In the case of increment consuming sources in North Dakota, their emissions were modeled for increment exceedance at the time of permitting based on allowable emissions, using modeling approved by EPA. Modeling based on allowable emissions for such sources is required by EPA rules and guidance, and has been done using models

Richard R. Long April 29, 2002 Page 6

approved by EPA for more than 20 years. EPA also allows the use of such emissions for emissions offsets and "bubbling." The allowable SO<sub>2</sub> emissions from all of the major stationary sources affecting Class I areas have been determined either not to exceed the Class I increment or not to cause adverse effects on air quality related values and to meet the alternate applicable increments. As such, their emissions are fully authorized and violate no requirement of the Clean Air Act.

For baseline sources, EPA has calculated increment consumption by comparing the calculated 90th percentile of the 2-year historical "baseline" emissions (1976-1977) with the 90th percentile of CEMS-derived emissions for the "current" period (1999-2000). However, the NDDH has discretion to use source-specific allowable emissions as baseline emissions instead of 2-year "actual" historical emissions representative of normal operations. North Dakota Administrative Code, Section 33-15-15-01.1.9, which mirrors EPA's own regulation at 40 CFR, Section 51.166(b)(21)(ii)&(iii), provides that:

- "'Actual emissions' means the actual rate of emissions of a contaminant from an emissions unit, as determined in accordance with paragraphs 1-4.
- (1) In general, actual emissions as of a particular date must equal the average rate, in tons per year, at which the unit actually emitted the contaminant during [the] 2-year period which precedes the particular date and which is representative of normal source operation. . . .
- (2) The department may presume that sourcespecific allowable emissions for the unit are equivalent to the actual emissions of the unit." (Emphasis added)

EPA has argued that the authority of states to select allowable emissions, as provided in the cited regulation, is severely constrained, and may be exercised only in limited circumstances. EPA's position, however, conflicts with the plain language of the North Dakota regulations, approved by EPA as part of the North Dakota SIP, and with case authorities which confer on states the right and responsibility to manage increment consumption. Bethlehem Steel Corp v. Gorsuch, 742 F.2d, 1028, 1036 (7th Cir. 1984). ("The Federal")

Richard R. Long April 29, 2002 Page 7

Government through the EPA determines the ends - the standards of air quality - but Congress has given the states the initiative and a broad responsibility regarding the means to achieve those ends through state implementation plans and timetables for compliance"); *Train v. NRDC*, 421 U.S. 60, 79 (1975) (EPA "is relegated by the Act to a secondary role in the process of determining and enforcing the specific, source-by-source emission limitations which are necessary if the national standards it has set are to be met.")

In Alabama Power v. Costle, 636 F.2d, 323, 361 (D.C. Cir., 1979) the court specifically spoke to the authority of the states regarding protection of PSD increments: "We rule that EPA has authority under the statute to prevent or correct a violation of the increments, but the agency is without authority to dictate to the States their policy for management of the consumption of allowable increments." (Emphasis added) The court stated further that:

"EPA has evidenced an intention to promulgate guidelines to help the states manage the allocation of available increments. This is an appropriate step. But this is not to say that the agency may prescribe the manner in which the states will manage their allowed internal growth. In the allocation of responsibility made by Congress, maximum limitations have been set. These must be observed by the states, but assuming such compliance, growth-management decisions were left by Congress for resolution by the states." (Emphasis added) At 364.

The choice as to whether to use allowable or historical actual emissions to determine baseline concentrations is an important aspect of a state's right and responsibility to manage increment consumption and economic growth. That decision directly affects the amount of emissions from baseline sources which are included in the baseline. This, in turn, affects the amount of baseline source emissions which might consume increment and thereby reduce the amount of increment available for consumption by new projects, thus reducing the potential for economic growth in the state.

EPA's 1978 PSD regulations provided that baseline emissions were allowable emissions. "Actual emissions also includes in the baseline any future increases in hours of operation and capacity utilization as they occur if such are allowed to the source as of August 7 1977, and if the source could have been

Richard R. Long April 29, 2002 Page 8

reasonably expected to make these increases on this date." 43 Fed. Reg. 26400, cols. 2 and 3. EPA confirmed the effect of the 1978 regulations when it repromulgated revised PSD regulations in 1980:

"... EPA's June 1978 policy required increment calculations to be based on emissions allowed under a permit or a SIP and not on actual source emissions." 45 Fed. Reg. 52720, col. 3 (Aug. 7, 1980)

In 1980, EPA changed its approach in response to "the Gulf Coast problem", discussed at 45 Fed. Reg. 52720. Under the 1980 regulations, "baseline concentration" was defined to include "the actual emissions representative of sources in existence on the applicable minor source baseline date . . .". 40 CFR 51.166(b)(13) The default definition of "actual emissions" was:

"In general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the unit actually emitted the pollutant during a two-year period which precedes the particular date and which is representative of normal source operation." 40 CFR 51.166(b)(21)(ii).

However, the 1980 regulations went on to acknowledge the right and responsibility of the states to make choices concerning increment management and consumption, and thus provided that, in the alternative,

"[t]he reviewing authority may presume that sourcespecific allowable emissions for the unit are equivalent to the actual emissions of the unit." (Emphasis added) <u>Id.</u>

The plain language of the federal and North Dakota regulations does not purport to constrain the state's discretion to select allowable emissions as baseline missions.

North Dakota baseline sources were in existence before the adoption of the 1980 changes, and thus it would be appropriate to apply to them the 1978

Richard R. Long April 29, 2002 Page 9

policy. When it modified the pre-existing policy in 1980, EPA stated that: "PSD applications pending today before EPA or a state agency authorized to review or issue PSD permits will be reviewed for increment consumption on the basis of the revised policy." 45 Fed. Reg. 52676, 52717, col. 3 (Aug. 7, 1980). The strong implication is that for dates prior to August 7, 1980, the previous policy should apply.

In the September 7th letter (App. B to the Response), Basin Electric urged the NDDH to exercise its discretion to select allowable emissions to establish baseline concentrations. The state has circulated a draft paper respecting baseline emissions, which tentatively would use actual emissions for this purpose, rather than allowable emissions. However, NDDH is receiving comments on its draft paper at the hearing scheduled for May 6, 2002. If the state were to exercise its discretion to utilize allowable emissions, that decision would require EPA to revise it's modeling accordingly.

For additional discussion of the choice between actual and allowable emissions for the purpose of ascertaining baseline concentrations, see App. B. at pages 23 to 27.

#### NORMAL SOURCE OPERATIONS

If actual emissions are used to determine baseline concentrations, those emissions must be representative of normal source operations. With the exception of the Milton R. Young Unit 2, which had been in operation for only 9 months as of the minor source baseline date, EPA uniformly has used 1976-77 as the baseline period. It made no serious effort to ascertain whether or not this 2-year baseline period was representative of normal operations. 40 CFR 51.166(b)(21), defines actual emissions as the rate of emissions during a 2-year period

"which precedes the particular date and which is representative of normal operations. The reviewing authority may allow the use of a different time period upon a determination that it is more representative of normal sound operation. (Emphasis added)

The 1980 PSD preamble stated that:

"If a source can demonstrate that its operation after the baseline date is more representative of normal

Richard R. Long April 29, 2002 Page 10

source operation than its operation preceding the baseline, the definition of actual emissions allows the reviewing authority to use the more representative period to calculate the source's actual emissions contribution to the baseline concentration. EPA thus believes that sufficient flexibility exists within the definition of actual emission to allow any reasonably anticipated increases or decreases genuinely reflecting normal source operation to be included in the baseline concentration." (Emphasis added) 45 Fed. Reg. 52714-15 (Aug. 7, 1980).

The NDDH's April 2002 draft modeling report, and the accompanying document entitled "Prevention of Significant Deterioration Sulfur Dioxide Baseline Emission Rates" (April 2002), evaluated the appropriate 2-year baseline period which was representative of normal source operation for each baseline source. In some cases, the NDDH proposes a baseline period other than 1976-77. Basin Electric, in the September 7th letter, set forth its position regarding the appropriate baseline period for Leland Olds Units 1 and 2. The NDDH has scheduled a hearing on May 6, 2002 for interested parties to submit comments on the agency's draft modeling results. Additional information regarding representative baseline periods for baseline sources are being developed by Basin Electric and will be presented at that hearing. It is premature for EPA to complete its modeling, using 1976-77 as the baseline period, until it has the benefit of NDDH's final judgment on this issue. In the case of Basin Electric's Leland Olds Station, Unit 2 at that station had not yet begun normal operations on December 7, 1977 or the preceding 2 years. As a result, the potential to emit of that unit should be included in the baseline, and none of its emissions should be treated as increment consuming, as EPA does.

#### **INCREMENT CONSUMING EMISSIONS**

EPA's results are inherently biased because they compare baseline data and current data which are based on different measurement methods.

EPA utilized CEMS data from plants such as those of Basin Electric to determine 1999-2000 current SO<sub>2</sub> emissions for power plants, and AP-42 (standard emission factors based on industry averages) calculations to determine baseline SO<sub>2</sub> emissions for them. This is comparing apples to oranges, and is scientifically and technically flawed. This flaw is not cured by EPA's technique of adjusting baseline values to try to approximate a 90th

Richard R. Long April 29, 2002 Page 11

percentile value for baseline years. Available data indicates, generally, that SO<sub>2</sub> CEMS data obtained in recent years tends to overstate actual emissions (see the February 27, 2002 letter from the NDDH to EPA Region VIII, attached as Appendix C to the Response). Comparing CEMS data with AP-42 data overstates the amount of increment consuming emissions from baseline sources. In the September 7th letter, App. B at pages 29-32, Basin Electric proposed an alternative method for determining baseline emissions, which can more fairly be compared to current CEMS data. EPA's own Draft Modeling Analysis states that: "EPA believes any increment analysis should follow the same methodology for determining emissions in the base year as in the current year, particularly where like data are available, as is the case here." Unfortunately, EPA did not follow its own advice.

It is suggested to use CEMS data for 2000 and CEMS back-calculated to a period representative of normal source operations (if the 2-year historical test) is to be used. CEMS data specific to and measured at the source is evidently more accurate than AP-42 industry average emission estimates having nothing to do with the specific sources involved. If either an unbiased apples to apples, CEMS to CEMS back-calculated is used, or if allowable is used, there is essentially no increment consumed by sources such as Basin Electric's Leland Olds Station

#### INCREMENT EXPANDING EMISSIONS

The method for quantifying increment expanding emissions should be the same as the method for quantifying increment consuming emissions.

In its Draft Modeling Analysis, EPA states that, for the five sources that shut down since the minor source baseline date, the agency modeled the same emission rates the NDDH used in its 1999 modeling analysis. The 1999 modeling utilized average values for baseline emissions, consistent with EPA's prior direction to the State. Utilizing 90th percentile values to calculate increment consuming emissions, while using average values to calculate increment expanding emissions, distorts the amount of predicted increment consumption. Using different methods inherently skews estimated changes in air quality, and is inherently biased to overstate increment consumption. EPA's justification is that to use peak short-term emission rates would overestimate increment expansion, because sources were unlikely to operate at peak levels at the same time the worst meteorological conditions prevailed. If this justification were valid, it would follow that average values also should be used to calculate increment consumption. What is sauce for the goose is sauce for the gander. NDDH recently has proposed the use of short-term values based on

Richard R. Long April 29, 2002 Page 12

average emissions as the best approach to determine increment consumption. Comments on the Department's proposed approach will be heard at the May 6, 2002 hearing.

Whether or not one agrees with NDDH's approach, it is essential that the same method consistently be used to determine both increment consuming and expanding emissions. If 90<sup>th</sup> percentile values are used to determine increment consumption, 90<sup>th</sup> percentile values should be used to determine increment expansion.

For additional discussion on this point, see the September 7th letter, App. B at pages 38 to 39.

#### **VARIANCES**

Emissions from sources which were previously granted variances should not be included in determining whether Class I increments have been violated.

Two existing sources previously were granted variances for construction or modification, based on a finding by FLMs that they would not adversely impact AQRVs. These sources are the Great Plains Synfuels Plant and the Little Knife Gas Plant. EPA has erroneously included the emissions from these sources in modeling increment consumption. The most recent of the variances was published on March 12, 1993, for the Great Plains Synfuels Plant, although modeling predicted violations of the 3-hour and 24-hour SO<sub>2</sub> Class I increments at TRNP and the 24-hour increment at the Lost Wood Wilderness Area. The Department of the Interior found that the project would not increase visibility impacts, either plume blight or regional haze; that there was no evidence of existing air quality impacts on biological resources; that air quality in North Dakota had improved since 1984; and that the project would not cause or contribute to impairment of ecosystems, the quality of visitor experience, or to a diminution of the national significance of the Class I areas. Similar findings had been previously made respecting the Little Knife Gas Plant.

Despite the granting of these variances, EPA included the variance sources in its modeling, thereby effectively revoking the variances granted by the FLMs. There is no authority for doing so, and EPA's action conflicts with the letter and spirit of the variance regulations. The Class I increments were adopted as a means to an end, to protect AQRVs. It is the AQRVs, not the Class I increments, which are the ultimate determinant regarding air quality in Class I areas. Class I increments were described by Congress as "a flexible test . . . for determining where the burden of proof lies and is an index of changes in

### HOLLAND & HART LLP ATTORNEYS AT LAW

Richard R. Long April 29, 2002 Page 13

air quality. It is not the final determinant for approval or disapproval of the permit application." S. Rep. 95-127, 95th Cong. 1st Sess., at 35 (May 10, 1977). Congress clearly stated that the Class I increments and AQRVs are intended "to provide additional protection for air quality in areas where the Federal Government has a special stewardship to protect the natural values of a national resource." Id. at 34. EPA's regulations confirm that it is AQRVs, and not the Class I increments, which are the final determinant for protecting air quality in Class I areas. Permits can be denied based on AQRVs even when Class I increments are met. Conversely, permits can be granted where there is no adverse impact on AQRVs, despite modeled predictions of Class I increment violations. In this case, the FLMs have determined on four occasions that AQRVs are protected at levels of SO2 significantly exceeding current levels. For EPA now to include the variance sources in its modeling is to elevate the means above the end and distort the intent of the regulatory scheme.

Where a variance is granted, the Class I increment no longer applies. Instead, it is the Class II increment which applies to the variance source. 40 CFR 51.166(p)(4). By including two variance sources in its Class I increment modeling, EPA effectively would make made these sources again subject to the Class I increment, in contravention of the variances granted to the sources and alternate increments which are applicable under section 165(d)(2)(C)(iv).

EPA's position effectively would nullify any and all variances granted pursuant to the PSD regulations. There is no authority for doing so. For additional discussion and treatment of this topic, see the September 7th letter and Dakota Gasification Company's letter of September 7, 2001 to the NDDH, included as Appendix D to the Response.

#### **SULFUR CONTENT**

The use of average sulfur content rather than maximum sulfur content to establish base year short-term emissions is inherently biased.

At pages 22 to 25 of its Draft Modeling Analysis, EPA states that rather than using the maximum coal feed rate and maximum sulfur content for baseline years, it calculated emissions based on annual coal use and average sulfur content, then applied a peak-to-peak mean ratio from current year CEMS data to determine short-term baseline emissions. The only reason given for not utilizing maximum sulfur and coal feed rates was:

Richard R. Long April 29, 2002 Page 14

"... we believe that the maximum coal feed rate numbers are very uncertain. We are not aware of any official method or quality assurance process that has been used to arrive at these numbers. According to the State, at least one company has questioned the accuracy of these data. For these reasons, we dismissed this option for calculating short-term emissions. In using maximum hourly feed rates and maximum sulfur content, this option would likely overpredict SO<sub>2</sub> emissions in the base year."

EPA Draft Modeling Analysis at 22.

Thus, based on second-hand information that someone might have questioned the accuracy of the data, and a lack of information respecting quality assurance, EPA has discarded actual empirical data in favor of an artificial method of calculation. EPA's method assumes that the ratio of average to maximum sulfur content in base years would be the same as the current year's CEMS peak-to-mean ratio. There is no evidence to support this assumption. This method is based on surmise and speculation and cannot be justified. The only reasonable approach is to use the empirical data that is available.

#### PSD INCREMENT RESPONSIBILITY

It is the State of North Dakota, not EPA, which has the primary right and responsibility to manage and monitor increment consumption and protect PSD increments.

Section 101 of the Clean Air Act states:

"... Air pollution prevention (that is, the reduction or elimination, through any measures, of the amount of pollutants produced or created at the source) and air pollution control at its source, is the primary responsibility of States and local governments." 42 U.S.C. § 7401

Section 163(a) of the Clean Air Act provides that:

Richard R. Long April 29, 2002 Page 15

"In the case of sulfur oxide and particulate matter, each applicable implementation plan shall contain measures assuring that maximum allowable increases over baseline concentrations of, and maximum allowable concentrations of, such pollutants shall not be exceeded." (Emphasis added) 42 U.S.C. § 7473.

As noted above, the court in Alabama Power v. Costle, 636 F.2d 323, 361-364 (D.C. Cir. 1979) made it clear that management of increments was the prerogative of the states. Thus, it is the NDDH in this case that is responsible for determining: which sources are included in baseline concentrations, and whether to use (1) source-specific allowable emissions, (2) two year historical emissions representative of normal operations, or (3) potential to emit; quantifying emissions included in baseline concentrations; quantifying current emissions; determining baseline years which are representative of normal operations; and, modeling the ambient impacts of increment consuming emissions. Indeed, EPA has recognized that it is the states' ultimate responsibility to make the judgment whether a Class I area is threatened. "While the ultimate decision on whether a Class I area is adversely affected is the responsibility of the permitting authority, the FLM has an affirmative responsibility to protect air quality related values that may be affected." 40 CFR Part 51, Appendix W, Section 7.2.6. In North Dakota, the FLMs have pronounced as recently as 1993 that AQRVs are not adversely affected. SO<sub>2</sub> emissions in North Dakota affecting the Class I areas have decreased significantly since then. If NDDH, as the permitting authority, determines the Class I increments are not exceeded, that determination must be respected as the decision of the agency having ultimate authority.

Holland & Hart requested the documents on which EPA has based many of its decisions in a Freedom of Information Act Request dated March 20, 2002. EPA has not yet provided those documents, and has withheld other documents. When and if that documentation is produced, we would appreciate the opportunity to comment on whatever legal or other bases EPA may have for contending that a SIP revision may be necessary to protect Class I areas in North Dakota and Eastern Montana.

Very truly yours,

Robert T. Connery of Holland & Hart LLP

Richard R. Long April 29, 2002 Page 16

RTC:jj Attachment

cc:

Deborah Levchak, Esq.

Robert Hammer Kirk Winges Robert Paine

2935846\_1.DOC